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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,644	12/01/2004	Kars-Michiel Hubert Lenssen	NL 020459	8772
	7590 06/04/200 LLECTUAL PROPER	EXAMINER		
P.O. BOX 3001			HOLLINGTON, JERMELE M	
BRIARCLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER	
			2829	
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			MAIL DATE	DELIVERY MODE
			06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summary	10/516,644	LENSSEN, KARS-MICHIEL HUBERT				
Office Action Summary	Examiner	Art Unit				
·	Jermele M. Hollington	2829				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was preply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on 17 May 2007.						
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL. 2b)⊠ This action is non-final.					
,—	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•					
4) ⊠ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-12 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and all accomposed are specified any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

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DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
- 1. The disclosure is objected to because of the following informalities: there are no section header in the specification as provided in 37 CFR 1.77(b).

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Mouchot et al (5708407).

Regarding claim 1, Mouchot et al disclose [see Figs. 1-2 and 5] a sensor (sensor 10) for measuring a magnetic field induced by a current of charged particles comprising at least two magneto resistive sensor element (magneto resistive tape layers 21) for enclosing the magnetic field induced by the current of charged particles, the magneto resistive sensor elements (21) being arranged perpendicularly to the current during use [see also col. 4, line 47- col. 5, line 43].

Regarding claim 2, Mouchot et al disclose the magneto resistive sensor elements (21) have a circular shape [see col. 4, lines 47-53].

Regarding claim 3, Mouchot et al disclose the magneto resistive sensor elements (21) are present on a flexible substrate (substrate 23).

Regarding claim 4, Mouchot et al disclose the magneto resistive sensor elements (21) are a strip [see Fig. 5].

Regarding claim 5, Mouchot et al disclose the magneto resistive sensor elements (21) have a linear R(H) characteristic [see col. 4, lines 61-62].

Regarding claim 6, Mouchot et al disclose magneto resistive sensor elements (21) are arranged in a Wheatstone bridge configuration [see col. 4, lines 60-64 and Fig. 3].

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Regarding claim 7, Mouchot et al disclose two magneto resistive sensor elements (R1 and R2) of the Wheatstone bridge configuration [see col. 4, lines 60-64] are present on one side of the flexible substrate (23) and the other two magneto resistive sensor elements (R3 and R (H)) are present on the other side of the flexible substrate (30) [see also col. 8, line 54- col. 9, line 7].

Regarding claim 8, Mouchot et al disclose the two magneto resistive elements (R1 and R2) on one side of the flexible substrate (23) have the same magnetization direction [see also col. 8, line 54- col. 9, line 7].

Regarding claim 9, Mouchot et al disclose a pair of two magneto resistive sensor elements (R1 and R2) of the Wheatstone bridge configuration [see col. 4, lines 60-64] has been stacked on top of the other pair of magneto resistive sensor elements, and between the two pairs an insulating material is present and a conductor is present for carrying the current of charged particles [see also col. 8, line 54- col. 9, line 7].

Regarding claim 10, Mouchot et al disclose a method for measuring a current (I) of charged particles using the sensor (sensor 10) as claimed in anyone of the claims 1 or 2, comprising the steps of: determining a change in resistance in the sensor (10) according to the invention caused by a magnetic field (H) induced by the current (I) of charged particles [see col. 6, line 11- col. 8, line 31], comparing the change in resistance with a reference characteristic (R (H)) of the sensor (10) of the resistance versus magnetic field (H) and determining the magnitude of the magnetic field [see col. 6, line 11- col. 8, line 31], calculating the magnitude of the current (I) from the magnitude of the magnetic field (H) [see col. 7, line 48- col. 8, line 31].

Regarding claim 11, Mouchot et al disclose making use of the sensor (10) according to claim 9, wherein a current (I) is sent through a first conductor (conductor 11) and a current

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having an opposite sign is sent through a second conductor positioned parallel to the first conductor for measuring a residual current.

4. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al (6141197).

Kim et al disclose [see Fig. 1] a protective switch device (circuit breaker 10) for protecting a user of an electrical device by switching a supply current [via power supply circuit 28] to the electric device off in case of malfunction of the electric device, comprising a sensor (trip solenoid 33), and further comprising: a comparator circuit (hall sensor 23) comparing an output current or voltage of the current sensor with a reference current or voltage respectively, and a relay device (trip unit 19) switching the supply current dependent on the output current or voltage of the comparator circuit (23).

Conclusion

5. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:00 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jermele M. Hollington Primary Examiner

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JMH May 30, 2007